ABSTRACT OF THE DISCLOSURE

Disclosed are methods and apparatus to control the actions of a user terminal (UT) located at a remote location, possibly far from a gateway (GW), which has an interface to the Public Switched Telephone Network (PSTN) and/or to the Internet. A computer generated and stored database of an area (referred to as a Confidence Polygon), a volume (referred to as a Confidence Volume), and/or a plane (referred to as a Confidence Surface) is used to establish a geometric shape located on the earth, above the earth or in space, or combinations thereof. In addition, there is assigned to these areas, volumes and/or planes a static or a variable value referred to as a Confidence Limit (CL) that can be compared to a value of an error (E) in a position location of the UT. The error signal can either be generated by the UT or by the GW. A controller, preferably a part of the GW, acts upon the database of the geometric shapes, and the assigned or derived values of CL and E, to determine if the comparison of CL and E, combined with the current position of the UT, yields a certain result according to the operational mode of the GW controller. There can be many operational modes of the controller. Depending on the operational mode the result of the comparison of the CL assigned to the area, volume or plane is used to affect control of the UT or an external device attached to the UT. By example, the UT may be forbidden or allowed to access the system or to make or receive a call, or some operational characteristic(s) of the UT may be specified, such as transmitter power, frequency, and the like. The end result is an ability to provide protection for a site, such as a radio astronomy site, from UT emissions.